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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,838	09/02/2003	Chih-Kuang Chang		4129

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WEI TE CHUNG  
FOXCONN INTERNATIONAL, INC.  
1650 MEMOREX DRIVE  
SANTA CLARA, CA 95050

EXAMINER

CHAWAN, SHEELA C

ART UNIT	PAPER NUMBER
2624	

DATE MAILED: 12/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/653,838

Applicant(s)

CHANG ET AL.

Examiner

Sheela C. Chawan

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/10/06, 9/2/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 1/10/06, 9/2/03, the information disclosure statement is being considered by the examiner.

### ***Drawings***

3. The Examiner has approved drawings filed on 9/2/03.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-10 are rejected are rejected under 35 U.S.C. 102(e) as being anticipated by Yashida et al., (US. 6,141,439, Listed in IDS, filed on Jan 10, 2006).

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As to claim 1, Yashida discloses an image measuring system for obtaining measurement data on an object by processing images thereof, the image measuring system comprising:

an image (column 4, lines 13-15) obtaining device for obtaining a first image (note, images are obtained by a pair of stereoscopic device, column 4, lines 23-24, fig 2, 21) of an object to be

measured and a second image of a standard object (column 4, lines 24-27) ; and

a measurement computer linked to the image obtaining device via a communication network (fig 1) processing the first image and the second image to obtain measurement data on the object, the measurement computer (fig 2, 23) comprising:

an image obtaining module for obtaining the first image and the second image (fig 2, 23);

an image processing module for processing the first image and the second image, and for obtaining basic data needed in measuring the object (note fig 8, element 7, extracting data based on the width from the reference image) ; and

an image measuring module for computing an actual size of the object based on the basic data (note, correcting magnification of the reference image, column 5, lines 9- 58, column 6, lines 4- 49, copy claim 1, a data magnification .....).

As to claim 2, Yashida discloses the image measuring system as claimed in claim 1, wherein the image obtaining device is a digital camera (column 2, lines 5-22).

As to claim 3, Yashida discloses the image measuring system as claimed in claim 1, wherein the first image and the second image are obtained under the same conditions (note, correcting magnification based on the distances between the lattice points mapped on the images, the magnification of the data in the vicinity of the reference points so that it becomes virtually equal to the magnification of the searched data (column 2, lines 5-22).

As to claim 4, Yashida discloses the measuring system as claimed in claim 1, wherein the image-processing module comprises:

- a format conversion sub-module for converting formats of obtained images into formats, which can be identified by a corresponding measurement computer (column 1, lines 6- 15).

- a proportion conversion (fig 2) sub-module for computing a conversion proportion based on an actual size and an image size of the standard object (column 5, lines 23- 33);and

- a border processing sub-module for ascertaining borders of different parts of the measured object according to different lattice densities in the first image (column 5, lines 9-40).

As to claim 5, Yashida disclose the image measuring system as claimed in claim 1, wherein the image processing module further comprises an image adjusting sub-module for adjusting the first image according to different camera lens focuses of the image obtaining device (fig 2, element 23 and 24).

As to claim 6, Yashida discloses an image measurement method for obtaining measurement data on an object by processing images thereof, the method comprising the steps of (fig 8, step 6 and 7);

- (a) obtaining a first image of an object to be measured and an second image of an standard object (fig 8, step 6)
- (b) converting formats of the first image and the second image into formats which can be identified by a measurement computer, and computing a conversion proportion based on an actual size and an image size of the standard object (column 5, lines 9-40); and
- (c) measuring sizes of different parts of the object in the first image, and computing actual sizes of the parts according to the conversion proportion ( column 7, lines 16-20).

As to claim 7, Yashida discloses the image measuring method as claimed in claim 6, wherein the images are obtained by a digital camera (column 4, lines 1- 15).

As to claim 8, Yashida discloses the image measuring method as claimed in claim 6, wherein step (b) further comprises the step of ascertaining borders of different parts of the object according to different lattice densities in the first image (column 7, lines 23-42).

As to claim 9, Yashida discloses the image measuring method as claimed in claim 6, wherein step (b) further comprises the step of adjusting the first image according to a camera lens focus of the image obtaining device (column 3, lines 24- 36).

As to claim 10, see the rejection of claim 1 above.

***Other prior art cited***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kikuchi et al., (US. 6,801,650 B1) discloses mechanism and method for controlling focal point position of UV light and apparatus and method for inspection.

Tyan et al., (US. 6,980, 685 B2) discloses model-based localization and measurement of miniature surface mount components.

Siegel et al., (US. 5,015,867) discloses apparatus and method for measuring the diameter of a moving elongated material.

DeVane (US. 5,228,066) discloses system and method for measuring computer system time intervals.

Richer et al., (US. 7,046,839 B1) discloses techniques for photogrammetric system.

Schwarz (US. 6,975,404 B2) discloses device and process for the determination of the properties of reflective bodies.

Kitaguchi et al., (US. 7,001,024 B2 ) discloses image input apparatus using projected light.


**Contact Information**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheela C Chawan whose telephone number is. 571-272-7446. The examiner can normally be reached on Monday - Thursday 7.30 - 6.00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sheela Chawan  
Patent Examiner  
Group Art Unit 2624  
Dec 11, 2006

  
SHEELA CHAWAN  
PRIMARY EXAMINER